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(FILE 'USPAT' ENTERED AT 10:57:21 ON 10 JUL 1998)
      E VAN DER PLOEG, LEONARDUS/IN
L1      4 S E4
      E WARMKE, JEFREY/IN
L2      3 S E2
L3      4 S L2 OR L1
L4      36236 S PARA
L5      63 S TIPE
L6      4 S L5 AND L4
L7      12 S DROSPHILIA
L8      0 S DROSPHILIA
L9      0 S DROSPHILIA
L10     1664 S DROSPHILIA
L11     113 S L4 AND L10
L12     116 S VOLTAGE ACTIVATED
L13     9 S L12 AND L10
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> t cit ab 3

3. 5,593,862, Jan. 14, 1997, Nucleic acids encoding drosophila **tipe** cation channel proteins and recombinant expression of the same; Linda M. Hall, et al., 435/69.1, 252.3, 254.11, 320.1, 325, 348; 536/23.5 [IMAGE AVAILABLE]

US PAT NO: 5,593,862 [IMAGE AVAILABLE]

L6: 3 of 4

ABSTRACT:

The present invention provides for the isolation of genomic fragments from *Drosophila melanogaster* encoding **tipe** protein, which protein is required for expression of functional voltage dependent cation channels. A positional cloning coupled with transformation strategy was used to identify and isolate the **tipe** gene. A cDNA corresponding to the gene encoding **tipe** is also provided and characterized. In another aspect of the present invention, there is provided a functional voltage dependent cation channel. Methods for making and using the cation channel are also provided.

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=> s e2

L2                    3 "WARMKE, JEFFREY W"/IN

=> s l2 or l1

L3                    4 L2 OR L1

=> t cit 1-4

1. 5,688,917, Nov. 18, 1997, Process for functional expression of the para cation channel; Joseph P. Arena, et al., 530/350; 428/402.2; 435/4, 69.1 [IMAGE AVAILABLE]

2. 5,648,222, Jul. 15, 1997, Method for preserving cells, and uses of said method; Doris B. Tse, et al., 435/7.23, 7.24, 7.25, 960, 962; 436/64, 174, 176, 519, 522, 826 [IMAGE AVAILABLE]

3. 5,593,864, Jan. 14, 1997, Process for functional expression of the para cation channel; Joseph P. Arena, et al., 435/69.1, 325, 348, 356, 357, 364, 365, 367 [IMAGE AVAILABLE]

4. 5,550,049, Aug. 27, 1996, Process for identifying para cation channel modulators; **Leonardus H. T. Van Der Ploeg**, et al., 435/356, 252.3, 254.11, 320.1, 361, 364; 536/23.5 [IMAGE AVAILABLE]